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An epidemic of overdiagnosis and overtreatment: getting to the heart of the problem

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Overdiagnosis, the diagnosis of clinically irrelevant pathology, incurs both overtreatment with associated financial cost and significant concern to a population destined never to have symptoms. As this journal recently pointed out, this National Health Service crisis is a crisis of undercapacity, a crisis of underfunding and a crisis of overdemand.[1] Contributing on the demand side is a crisis of over-investigation, overdiagnosis and overtreatment. Sustainability demands clinicians engage with these concepts to keep services afloat. Specialists, however, and in particular cardiologists, remain unaware at best and complicit at worst to this issue. Engaging is now a moral imperative. We are too often choosing treatments offering marginal benefit with little regard to the opportunity cost these funds could have elsewhere within the NHS; one doctor's waste is another patient's delay.

Culture change throughout medicine is needed to drive efficiency. When proposing treatment strategies, clinicians need to refocus on what constitutes informed consent, connecting patients to the evidence in a way they can understand with terms such as number needed to treat. Appreciating the balance of risk and benefit must be re-prioritised as a cornerstone of the effective patient consultation. The need is especially acute in cardiology given the escalating cost of its delivery. Cardiovascular disease accounts for more than 10% of all inpatient episodes among men, and spending on the disease topped £6.8 billion in 2012/2013 representing 6% of the total NHS budget.[2] Prescriptions and operations for the prevention and treatment of cardiovascular disease are increasing year on year. As practising cardiologists, we call upon our colleagues to prioritise the wards and clinics over debating procedural technicality, and take accountability for ensuring our patients are informed, before they are treated. Given objective information, they may make the savings for us – less is often more. Research focus, however, remains more drugs, more tests and more devices, but we need research in doing more with less. The campaign to prevent overdiagnosis broadly addresses many challenges such as shared decision-making, conflicts of interest and value-based healthcare that must be faced by modern medicine if it is to deliver effective yet sustainable care.

The global interventional cardiac devices market was worth over $20 billion world-wide in 2016 and continues to grow at an annual rate of nearly 10%. Unequivocally, medical advance comes at a cost; but we must be steadfast in only providing what works. However, treatments with little or no evidence base such as the use of MitraClip in patients with severe mitral regurgitation not fit for surgery, are on the rise.[3] Not to mention that sadly, in the era of informed decision-making, patients still regard elective coronary artery stenting as potentially 'preventing' a heart attack, despite the procedure being accepted as not altering prognosis or preventing myocardial infarction when undertaken for angina.[4,5] Such findings lead the authors to question whether vested and not best interests render decision-making unbalanced; patients empowered by the facts is surely a pre-requisite for truly shared decision-making. Overuse in non-invasive cardiology also carries risk – nearly one in ten patients undergoing cardiac computed tomography are diagnosed with a clinically indeterminate finding, requiring further imaging or a procedure at significant cost and psychological morbidity.[6] While advances in the diagnosis of clinically significant pathology are welcomed, it seems modern cardiology is obsessed with superlatives such as faster and smaller rather than better and kinder.

Bodies such as NICE seem not immune from over medicalising the well. In 2015, following significant pressure from the General Practitioners Committee,

they overturned recommendations to extend statin prescriptions to individuals with a greater than 10% ten-year risk of developing ischaemic heart disease. The committee remarked that the Quality and Outcomes Framework indicators 'require a robust evidence base, and make a significant difference to patients and are backed for the profession' adding that the recommendations 'fail on all counts' (http://www.pulsetoday.co.uk/your-practice/qof/gp-leaders-unite-to-reject-nice-proposal-to-put-10-statin-threshold-in-the-qof/20010096.article).

The insatiable desire for more medicine from the population we serve is somewhat out of our control. Popular media is not helping with films like the 'Widowmaker' detailing a so-called conspiracy theory of silence over screening for ischaemic heart disease using computed tomographic coronary calcium scoring in the United States, in favour of costly stenting procedures. Although addressing the very real issue of vested interest in medicine, the film inadvertently advocates a completely unvalidated screening tool in an asymptomatic population.[7] Meanwhile, the health needs of the unworried unwell grow and require our scrutiny to prevent an explosion of healthcare consumption in the coming decade which would surely collapse our National Health Service. The under treatment of the already established diseases of lifestyle, namely type 2 diabetes and obesity need further focus, with poor diet taking primacy.[8]

As medical interventions become more technical, symmetry of information and understanding becomes not only an imperative with the patient but also with the general practitioner to ensure a coordinated multidisciplinary approach. With hospital medicine increasingly practised in silos of single diseases, it is often the general practitioner who is left trying to make sense of the whole patient. Doctors need to stop making meaningless diagnoses, prescribing non-evidence-based therapies, and research to further careers, not patient care. We need bravery for frank conversations with patients about the uncertainty in medicine, combining evidence with common sense.

We do not need more tests, more devices, more jargon. We need studies on de-prescribing cardiac medications,[9] research on how best to involve patients in shared decision-making, and to ensure that the populations enrolled in randomised controlled trials reflect the real-world elderly co-morbid patients most often treated.[10] Sadly, such work is unlikely to attract industry funding. We should not forget the old surgical adage; a good surgeon knows how to operate, a better one knows when to operate, and the best when not to operate.

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